



## **GELATINE AN UNIQUE HYDROCOLLOID**

Gelatine is a highly versatile natural ingredient that is used by the food, pharmaceutical and photographic industries for a variety of purposes

Gelatine is manufactured in facilities which maintain the highest standards for health and safety. The raw material used for production of gelatine is the naturally occurring protein collagen which is commercially sourced from the meat industry from healthy animals designated for human consumption. Each stage of the manufacturing process is rigorously controlled in modern laboratories to ensure purity and quality. The process of converting collagen into gelatine involves several cleansing and purification steps. The end result is an off white dry powder of the utmost purity.

Gelatine is a multifunctional ingredient with unique properties: it melts at body temperature and it forms thermoreversible gels. There is no satisfactory alternative or substitute for gelatine because of these two unique properties.

These unique properties and other significant intrinsic properties provide a highly versatile substance which can be used for:

- Thermoreversible gel formation
- Texturing
- Thickening
- (Water)-binding
- Emulsifying
- Stabilising
- Foaming
- Film forming
- Elasticity

Gelatine gives a unique mouthfeel in food application, already appreciated since ancient time. Gelatine is a foodstuff not a food additive. Therefore, gelatine can be used freely without limitation or qualification and does not require an 'E' number. Moreover, gelatine is a natural protein composed of the same amino acids as those found in the human body and contains 18 amino acids of which 9 out of 10 (of which 2 are only essential to children) are essential in the human diet. It is also known that gelatine hydrolysate derived from gelatine has a preventive and regenerative effect on the skeleton and locomotors system – especially bones, cartilage, tendons and ligaments.

A range of hydrocolloids or blends of - have been marketed to replace gelatine in both food and pharmaceutical applications. These alternative hydrocolloids have not successfully provided the combination of functionalities found in gelatine.

Some of the typical problems encountered are :

- final texture and mouth feel is different
- shelf life is inferior (faster drying out )
- change in processing parameters required, making production much more complicated and more sensitive for “rejections”
- the direct cost of the finished product often increases.

Gelatine's diversified uses and multiple advantages and superiority over other hydrocolloids in the food, pharmaceutical and photographic industries have earned it the descriptive terminology of the technologists' Swiss army knife. Gelatine is indeed the clear and natural choice for the full range of gelling, stabilising and thickening applications utilised by these industries.